Defense Finance and Accounting Se

System Acquisition through Milestone C

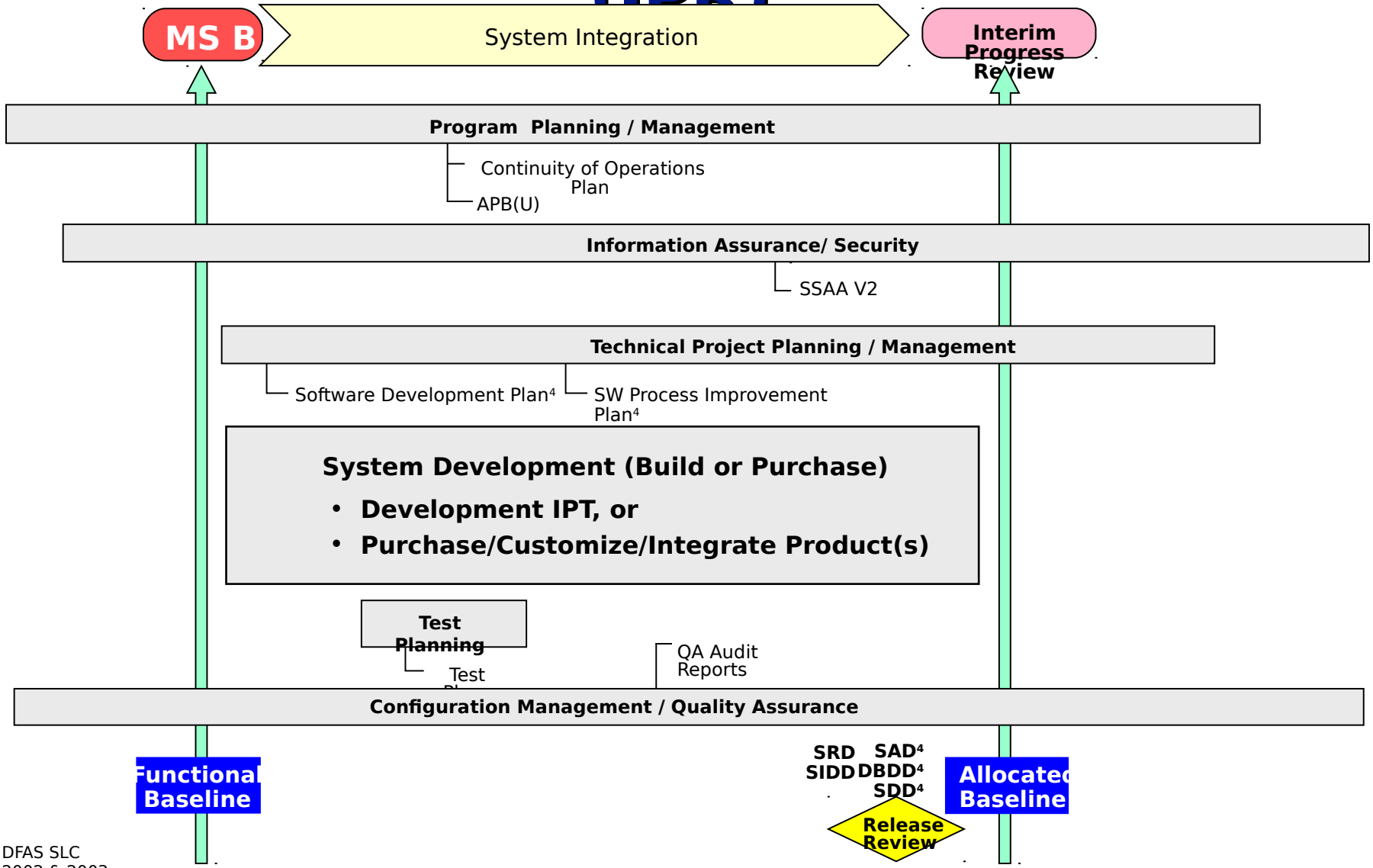
Your Financial Partner @ Work

DFAS-DTC
SLC Seminar 2002 & 2003

System Development and Demonstration

- System Integration
  - Program Planning/Management
  - Information Assurance/Security
  - Technical Project Planning/Management
  - System Development (Build or Purchase)
  - Test Planning
  - Configuration Management / Quality Assurance
- System Demonstration
  - Program Planning/Management
  - Information Assurance
  - Deployment Planning
  - Development Test & Evaluation
  - Operational Test & Evaluation
- Milestone C Review

System Integration Leads to Interim Progress Review (IPR)



System Integration

- **What's Done in this Phase:**
  - Develop continuity of operations plan
  - Update Acquisition Program Baseline (APB)
  - Verify info assurance design against requirements (System Security Authorization Agreement)
  - Develop and/or procure software product(s)
  - Transform data
  - Develop test plans
  - Control Program & Functional Baselines

- **Concludes with:**
  - **Interim Progress Review**

Program Planning/Management (1)

- Maintain Customer Relationship
- Establish Development Integrated Product Team
- Develop Continuity of Operations Plan
- Manage Program Acquisition (Update APB)
- Estimate Life Cycle Resources
- Determine Release Content
- Manage Program and Functional Baseline
- Perform Program Management Reviews
- Conduct Interim Progress Review

Information Assurance/Security (1)

- Conduct DITSCAP Phase 2, Verification

Technical Project Planning/Management

- Support Development Integrated Product Teams
- Coordinate Technical Integration *
- Assess Technical Project Risks *
- Manage Technology/Services Acquisition
- Manage Software Quality Assurance
- Ensure Configuration Management

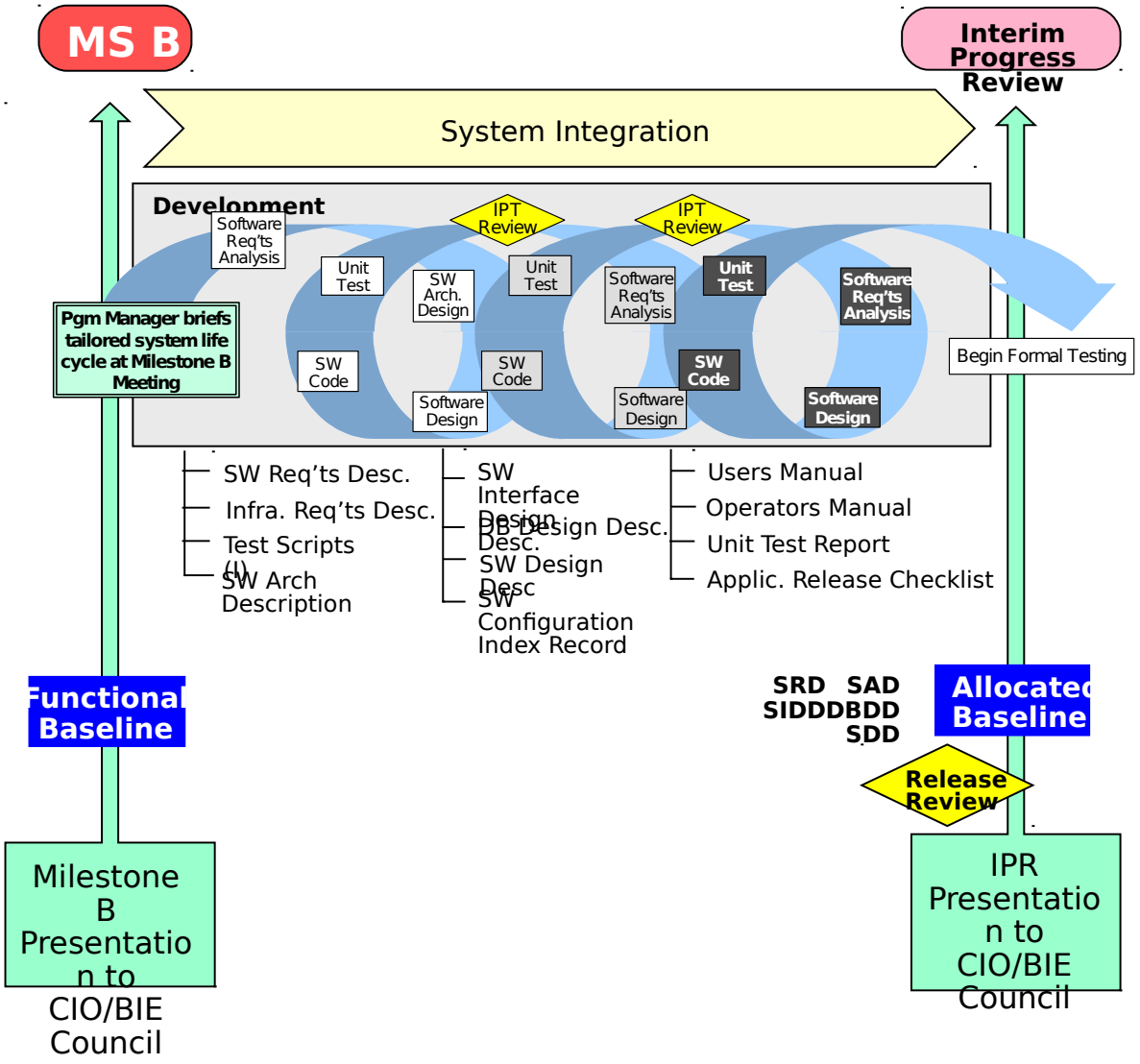
* repeated for each

System Development

- **Develop**
  OR
  Purchase/Customize/Integrate

  (Build vs. Buy)

Develop


MS B
Interim Progress Review
System Integration
Development
Software Req'ts Analysis
IPT Review
IPT Review
Unit Test
SW Arch. Design
Unit Test
Software Req'ts Analysis
Unit Test
Software Req'ts Analysis
Pgm Manager briefs tailored system life cycle at Milestone B Meeting
SW Code
SW Code
SW Code
Software Design
Software Design
Software Design
Begin Formal Testing
SW Req'ts Desc.
Infra. Req'ts Desc.
Test Scripts (I)
SW Arch Description
SW Interface Design Desc.
DB Design Desc.
SW Design Desc
SW Configuration Index Record
Users Manual
Operators Manual
Unit Test Report
Applic. Release Checklist
Functional Baseline
SRD SAD
SIDDD BDD
SDD
Allocated Baseline
Release Review
Milestone B Presentation to CIO/BIE Council
IPR Presentation to CIO/BIE Council

Develop (1)

- Identify Integration Requirements
- Perform Release Impact Analysis *
- Prepare Software Development Plan
- Develop Integrated Software Architecture *
- Perform Application Development
- Produce Documentation
- Perform Development Cycle Review
- Prepare Application Release Checklist *

More...

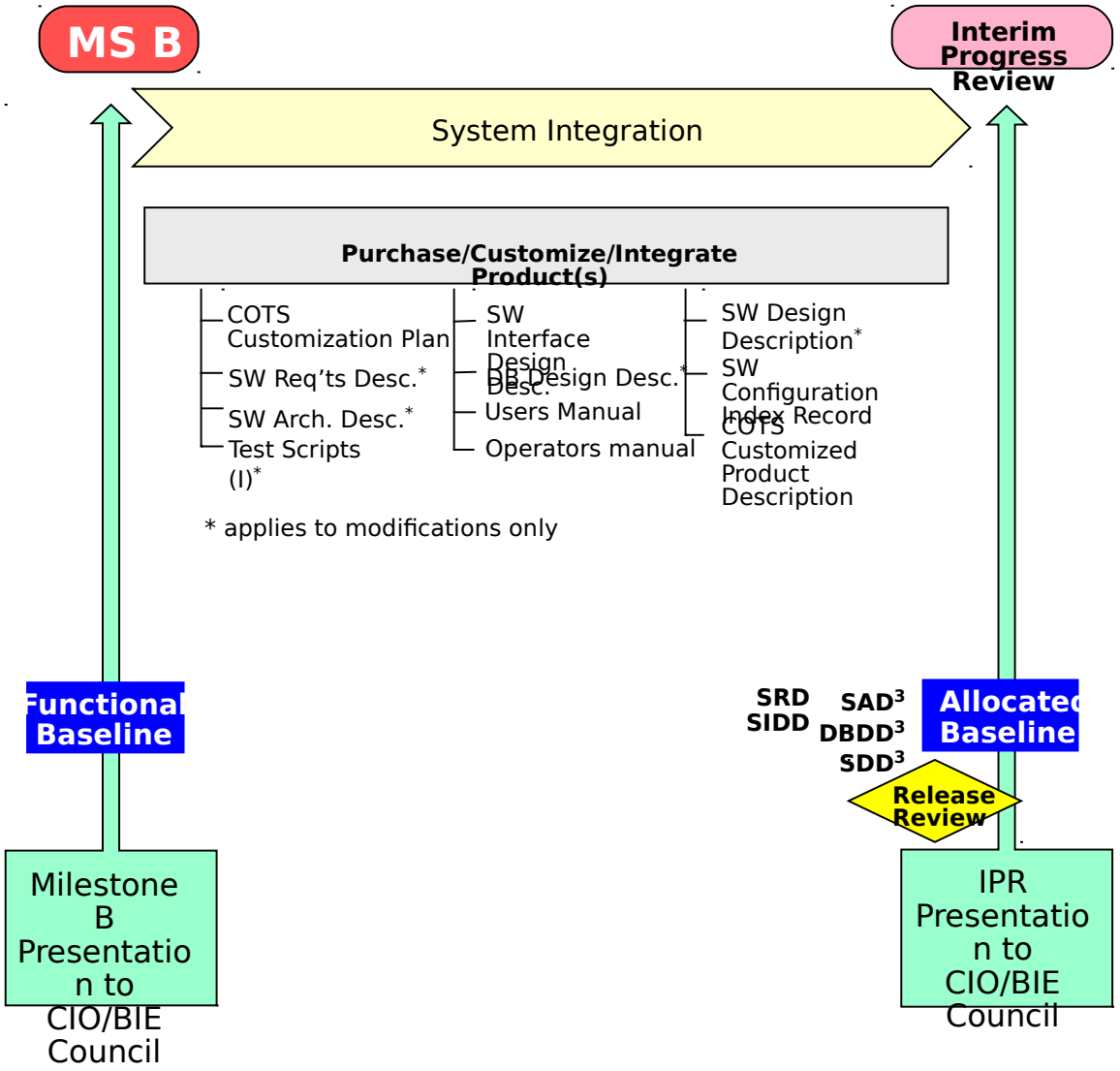
* repeated for each

Develop (2)

- Obtain Implementation Approval
- Establish Allocated Baseline
- Conduct Release Review *
- Perform SQA Audit of Product
- Perform SQA Review of Process

* repeated for each

Purchase/Customize/Integrate



Purchase/Customize/Integrate (1)

- Identify Integration Requirements
- Perform Release Impact Analysis *
- Prepare Software Development Plan
- Develop Integrated Software Architecture *
- Determine COTS Customization Requirements *
- Determine COTS Modification Requirements *
- Perform COTS Customization *
- Modify COTS

More...

* repeated for each

Purchase/Customize/Integrate (2)

- Produce Documentation
- Perform Development Cycle Review
- Prepare Application Release Checklist *
- Obtain Implementation Approval
- Establish Allocated Baseline
- Conduct Release Review *
- Perform SQA Audit of Product
- Perform SQA Review of Process

* repeated for each

Test Planning

– **Prepare Test Plans ***

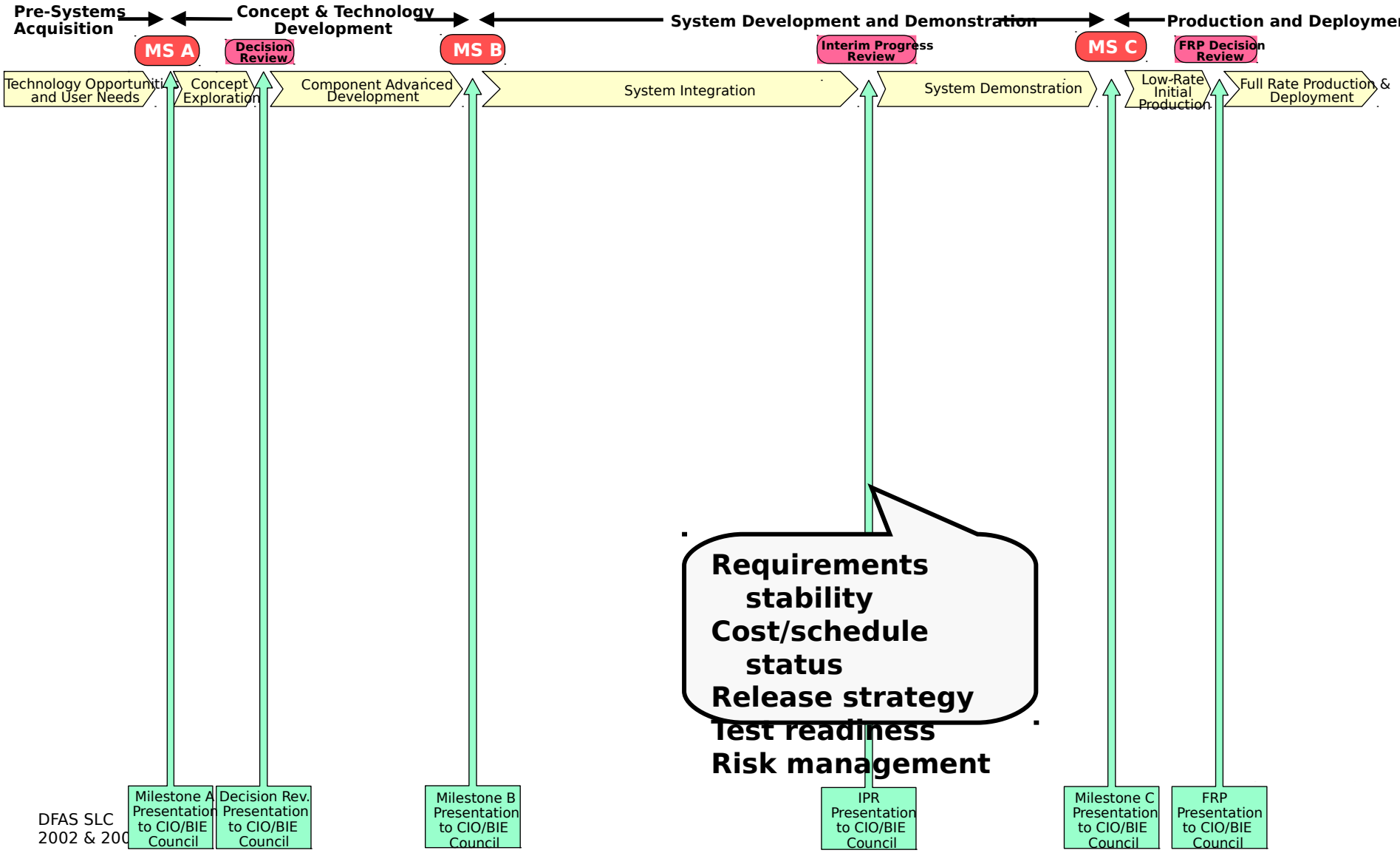
∗ repeated for each

Configuration Management/ Quality Assurance

- Establish Allocated Baseline *

* repeated for each

Interim Progress Review



Interim Progress Review (1)

- Are requirements stable? Are changes controlled?
- Is the system architecture solid?
- Are performance measures used? Is performance on track?
- Are system interface agreements valid?
- Are original cost estimates still valid?
- Do actual expenditures track with estimates?
- Does actual schedule track with plan?
- Has release strategy changed (what capabilities to what customers in what time frames)?
- Is Program compliant with Clinger-Cohen Act?
- Is test strategy sound?

Interim Progress Review (2)

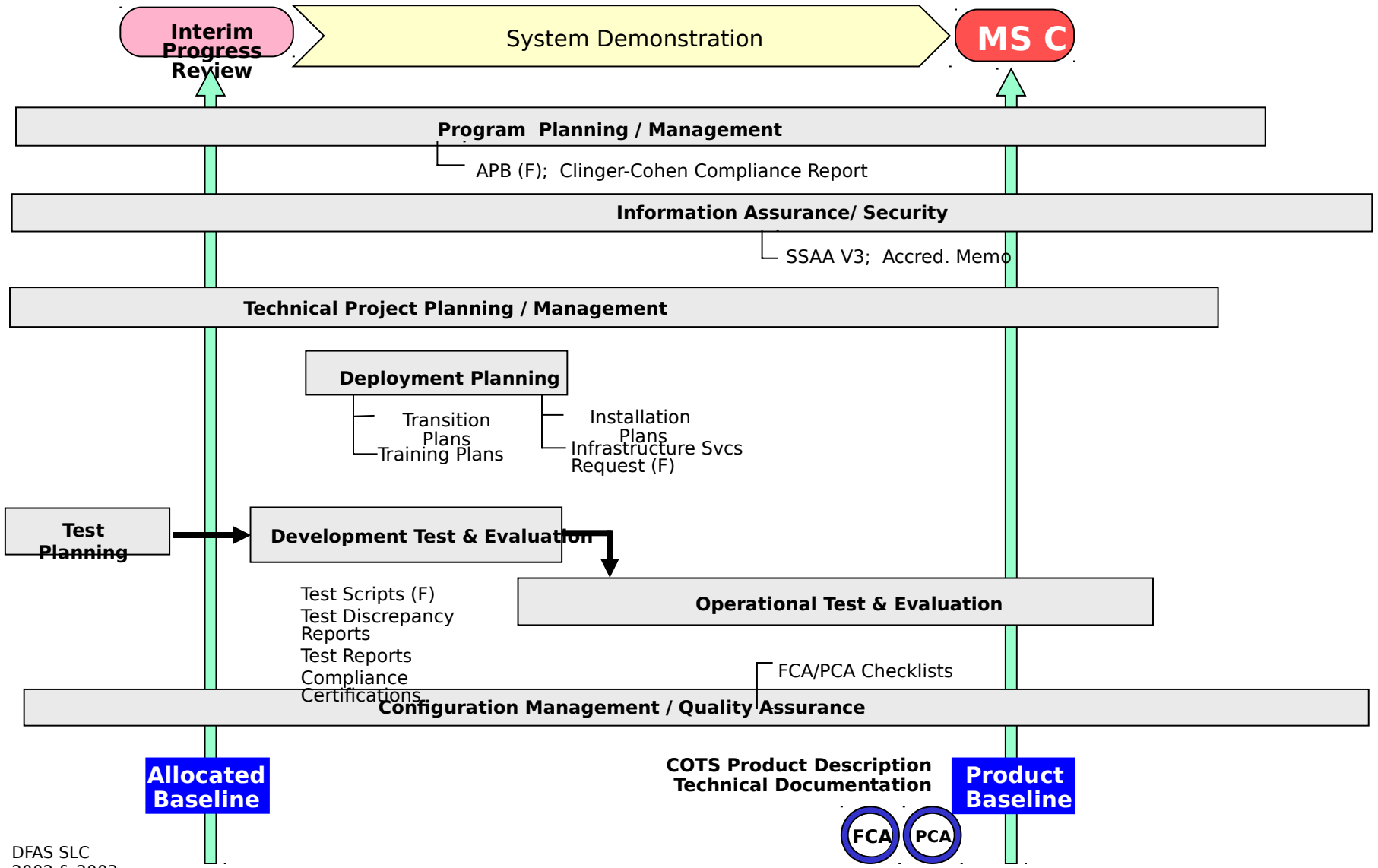
- Has transition to new business process & system been planned?
- Has user training been planned and funded?
- Are risks anticipated and mitigation planning done?
- Are there any user or customer issues?
- What problems arose during procurement and/or development?
- Is all required documentation prepared and approved?
- Is Program ready for testing? (some IPRs serve as TRRs)

Interim Progress Review: Conclusion

- *MDA decides whether to:*
  - *Continue the project or program,*
  - *Modify the project or program, or*
  - *Terminate the project or program.*

- *MDA issues the System Decision Memorandum*

System Demonstration Leads to Milestone C



System Demonstration

- **What's Done in this Phase:**
  - Finalize the Acquisition Program Baseline (APB)
  - Prepare Clinger-Cohen Compliance Report
  - Control Program, Functional, and Allocated baselines
  - Accredit system
  - Plan deployment
  - Perform DT&E
  - Plan OT&E
  - Perform Functional Configuration Audit
  - Perform Physical Configuration Audit

- **Concludes with:**
  - **Milestone C Review**

Program Planning/Management (2)

- Maintain Customer Relationship
- Finalize Acquisition Program Baseline (APB)
- Prepare Clinger-Cohen Act Compliance Report
- Manage Program, Functional, and Allocated Baseline
- Perform Program Management Reviews
- Conduct Milestone C Review

Information Assurance/Security (2)

- Conduct DITSCAP Phase 3 Verification to include Accreditation Memo

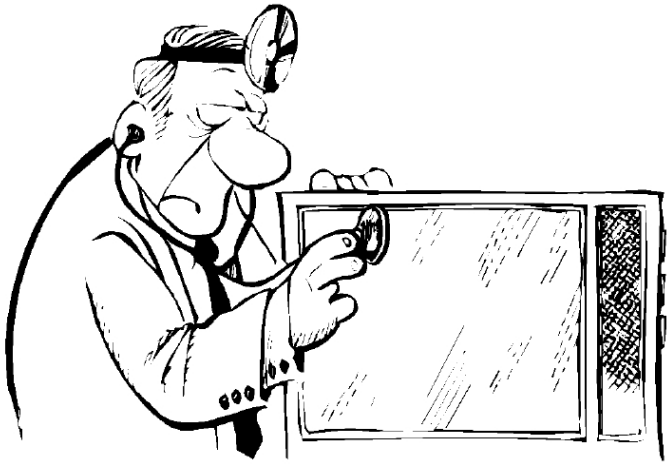
Deployment Planning

- Establish Continuity of Operations Capability
- Establish Transition Strategy *
- Prepare Product Delivery and Installation Plans *
- Issue User Advisory *
- Prepare User Training Plans *
- Produce User Class Materials *

* repeated for each

Developmental Test and Evaluation

- Train Test Users *
- Prepare Test Schedule *
- Develop Test Scripts and Test Data *
- Conduct Testing Peer Review *
- Build Application Test Environment *
- Conduct Test Readines Review *
- Perform Tests *
- Approve and Certify Test Results *



* repeated for each

Operational Test and Evaluation

- Train Test Users *
- Prepare Test Schedule *
- Develop Test Scripts and Test Data *
- Conduct Testing Peer Review *
- Build Application Test Environment *
- Conduct Test Readiness Review *
- Perform Tests *
- Approve and Certify Test Results *

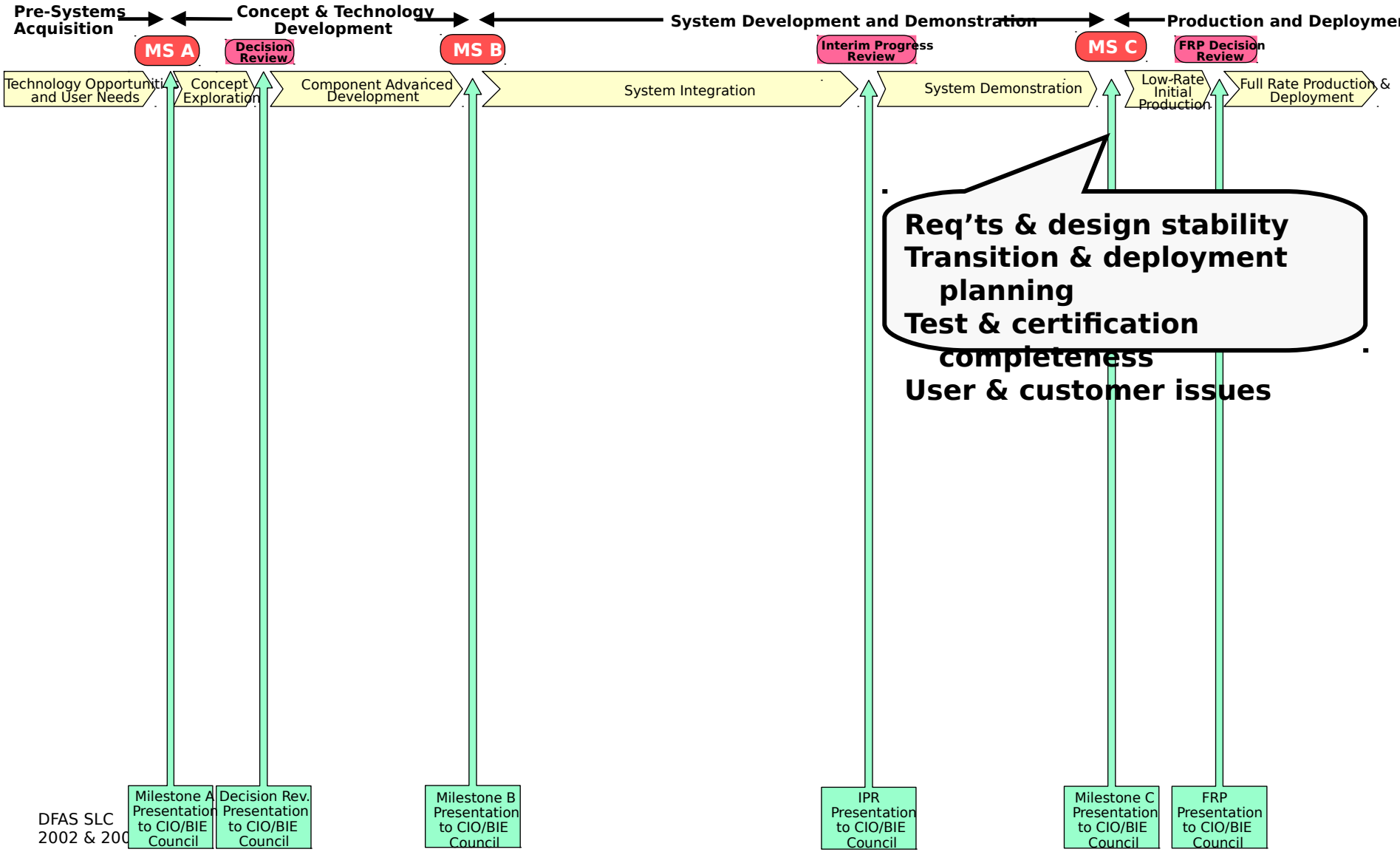
* repeated for each

Configuration Management/ Quality Assurance

– Establish Product Baseline *

* repeated for each

Milestone C


Pre-Systems Acquisition
Concept & Technology Development
System Development and Demonstration
Production and Deployment
MS A
Decision Review
MS B
Interim Progress Review
MS C
FRP Decision Review
Technology Opportunities and User Needs
Concept Exploration
Component Advanced Development
System Integration
System Demonstration
Low-Rate Initial Production
Full Rate Production & Deployment
Req'ts & design stability
Transition & deployment planning
Test & certification completeness
User & customer issues
Milestone A Presentation to CIO/BIE Council
Decision Rev. Presentation to CIO/BIE Council
Milestone B Presentation to CIO/BIE Council
IPR Presentation to CIO/BIE Council
Milestone C Presentation to CIO/BIE Council
FRP Presentation to CIO/BIE Council

Milestone C Briefing

MILESTONE C DECISION BRIEF
PRESENTATION OUTLINE

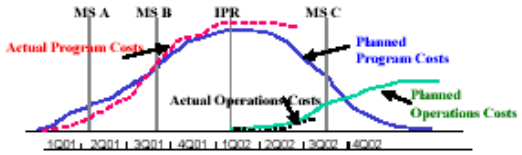
The Milestone C Decision Brief is a set of viewgraphs covering the following topics in a sequence selected by the briefer. Some of the material is updated from previous review briefs.

1. Architectural Summary

- *Show and discuss the new concept of operation using the OV-1 and OV-2 charts; and others as needed. For OV and SV charts, see DFAS documentation standard for C4I Support Plan).*
- *Show a schematic diagram of system components and internal interfaces (SV-1 diagram)*
- *Show diagram of external interfaces (SV-4 diagram)*

2. Cost Performance

- Summary Costs. *In a chart similar to below, provide a table and chart showing costs and benefits by year and milestone, updated from the Milestone B Decision Brief and the Interim Progress Review (IPR).*



Program Costs FY	Prior Yrs	02	03	04	05	To Comp	Total
Capital - Plan/Budget							
Capital - Actual							
Operating - Plan							
Operating - Actual							
Operations Costs							
Capital - Plan							
Capital - Actual							
Operating - Plan							
Operating - Actual							
Total Planned Costs							
Total Actual Costs							
Benefits							

- Return on Investment. *In a table similar to below, updated from the Milestone B Decision brief and the IPR, show the net present value of future benefits, the payback period, the savings-to-cost ratio, the benefits-to-cost ration, and the internal rate of return.*

Future Costs		Future Benefits		Net Present Value of Benefits	Payback Period (Years)	Return on Investment		
Nominal	Present Value	Nominal	Present Value			Savings-to-Cost Ratio	Benefits-to Cost Ratio	Internal Rate of Return
$12,000	$10,155	$27,600	$19,184	$9,029	8	1.5	1.9	14%

- Detailed Costs. *In a table similar to below, show approved estimated costs (from Life Cycle Cost Estimate (LCCE) or other approved document) for major cost categories by year versus actual expenditures (for past years) or proposed revised estimates (for current and future years). Cost categories listed below are examples only. Highlight any changes from the IPR brief.*

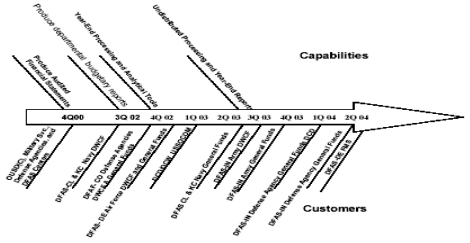
Cost Category	Year - 1	Current Year	Year + 1	Year + 2	Etc.
PMO Operations					
Requirements Gathering/Analysis					
Information Assurance					
TSO Cost					
COTS Product Buy/Support					
Training					
Network Infrastructure (DISA)					
Development Testing					
Operational Test and Evaluation					
Maintenance					
Total					

3. Schedule Performance

- *In a table similar to below, list major milestones, their originally planned completion dates, and either their actual completion dates (for completed tasks) or, if relevant, a revised completion date. Milestones shown are examples only.*

Milestone	Original Completion Date	Revised Estimated Completion Date	Actual Completion Date
Requirements Analysis			
Milestone B			
Development – Release 1			
DT&E – Release 1			
Development – Release 2			
DT&E – Release 2			
Milestone C			
OT&E			
IOC			
FOC			

- Deployment schedule. *Identify what capabilities are delivered to what customers and users in what releases. Consider using a fishbone diagram similar to that shown below. This is updated from the Milestone B Decision brief and the IPR.*



Milestone C (1)

- Are requirements stable? Are changes controlled?
- Is the system architecture solid?
- Are performance measures used? Is perf. on track?
- Are system interface agreements valid?
- Are approved cost estimates still valid?
- Do actual expenditures track with estimates?
- Does actual schedule track with plan?
- Has release strategy changed (what capabilities to what customers in what time frames)?
- Is Program compliant with Clinger-Cohen Act?
- Was development testing successful?

Milestone C (2)

- Has transition to new business process & system been planned?
- Has user training been planned and funded?
- Are risks anticipated and mitigation planning done?
- Are there any user or customer issues?
- What problems arose during testing?
- Is all required documentation prepared and approved?
- Is Program ready for OT&E? (some IPRs serve as TRRs)
- Has USD(C) approved system deployment??

Milestone C: Conclusion

- *MDA decides whether to:*
  - *Continue the project or program,*
  - *Modify the project or program, or*
  - *Terminate the project or program.*

- *MDA issues the System Decision Memorandum*